

UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 01-026 A)

In re Application of:)
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Ali Akgun et al.)
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Serial No.: 09/899,365)
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Filed: July 2, 2001)
)
For: Communication of Packet Arrival Times)
To Cable Modem Termination System)
And Uses Thereof)
)

EXHIBIT A TO SECOND PRELIMINARY AMENDMENT

Marked up version of claim amendments

12. In a data-over-cable system, a method for minimizing accumulation of TCP ACK packets at a cable modem, comprising the steps of:

[d)] a) said cable modem time stamping the arrival of TCP ACK packets from an end station connected to said cable modem;

[e)] b) transmitting one or more packets from said cable modem to a cable modem termination system containing data associated with a plurality of said time stamps;

[f)] c) said cable modem termination system obtaining from said time stamps a periodicity of TCP ACK packets arriving at said cable modem and responsively conducting a grant of bandwidth service for said cable modem based on said periodicity for transmission of said TCP ACK packets to said cable modem termination system.

23. A method of decreasing latency in a Voice over Internet Protocol (VoIP) session between a cable modem and a cable modem termination system, said cable modem termination system periodically transmitting grants of bandwidth during a nominal grant interval having a boundary in time commencing said nominal grant interval, the method comprising the steps of:

[d)] a) determining the latency L between a nominal interval grant boundary and the arrival of a voice packet at said cable modem;

[e)] b) said cable modem termination system determining said latency L ; and

[f)] c) said cable modem termination system shifting said nominal interval grant boundary an amount equal to L .